

Particle Physics Theory – working group

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28.11.2011

Topics to be covered

- General philosophy: theory topics connected to the subject areas of the other working groups should be covered within the text of those.

Theory part:

- **Background:** implementation of the European strategy so far, status of the theory research (wrt other regions, wrt experimental activities,...)
- **Organizational aspects** (CERN vs. other theory groups, relations with EU programmes, ...)
- Topics with special needs: **lattice gauge theory**
- Interdisciplinary topics: development of **software packages**
- Issues which are not closely related with the work of other working groups: "**formal theory**"

Working procedure

A set of questions (next slide) to be asked to various groups:

- some leaders in the European lattice community
- some leaders in the European "formal theory" community
- some leaders in the development of software tools
- some leading theorists in some representative European institutions
- some leaders in the theory community outside Europe

Questions

1. What are the areas of theory that may (or may not) require strategic coordination at the European level?
2. How do you see the medium-term development of theory research (research directions, human resources, organization)?
3. How do you see the role of the different EU actions for theory, and vice versa?
4. How do you see the role of CERN for European theory, and vice versa?
5. What are the strong/weak points of European theory versus other regions, and what could be done to improve on possible weak points?

Note: some questions may be modulated/removed for some subsets of the groups mentioned on the previous page.